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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,327	04/09/2004	Andrew C. Shum	BW-DKT03159	9688
32175	7590	06/26/2006	EXAMINER	
BORGWARNER INC. 3850 HAMLIN ROAD AUBURN HILLS, MI 48326			PILKINGTON, JAMES	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/821,327		SHUM, ANDREW C.	
	<b>Examiner</b>		<b>Art Unit</b>	
	James Pilkington		3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-10 and 12, as best understood, are rejected under 35 U.S.C.

103(a) as being unpatentable over Groger et al, USP 4,832,664, in view of Kato, USP 6,296,432 B1.

Re clms 1 and 7, Groger discloses a chain guide mounting system (Fig 1) which is mounted to an internal combustion engine (col 3 lines 13-15). Groger also discloses pins (28,29) being a first distance apart (Fig 1). The chain guide (Fig 1) having at least two slots (30,31) for receiving the pins, wherein the chain guide is mounted with the pins (28,29) through the slots (30,31) to the mounting surface, nearest edges of each pair of slots (30,31) of the chain guide, when mounted, being spaced apart by a second distance, wherein for at least one pair of pin shafts (28,29) and at least one pair of slots (30,31) the first distance is "equal to or slightly smaller" than the second distance such that the pin shafts (28,29) contact the nearest edges of the slots (30,31) (Fig 1).

Groger does indeed disclose pins (28,29) s/he does not disclose the mounting means as bolt.

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Kato teaches bolts (101) that comprise a bolt threaded section (103A) complementary to the bolt holes (105A) and a bolt shaft (103) extending from the bolt threaded section (103A), wherein the bolt (101) is mountable in the bolt holes (105A) for the purpose of connecting the bolt to a female screw member (105A) (col 1 lines 5-15), thus providing for an improved fastening means.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Groger, as taught by Kato, and provide bolts as the means of securing the chain guide to the engine.

Re clms 2 and 8, a chain guide is under no load when the chain is not in contact with the surface of the chain guide. Therefore, any chain guide can be under no load by removing the chain.

Re clms 3 and 9, a chain guide is under a load when the chain is in contact with the surface of the chain guide. Therefore, any chain guide can be under a load when the chain is in place.

Re clms 4 and 10, Groger discloses the mounting surface being an engine housing (col 3 lines 13-15).

Re clms 6 and 12, Groger discloses that one first distance is greater than the second distance such that at least one of the bolt shafts (28,29) does not contact the nearest edges of the bolt slots (30,31) (Fig 4).

### ***Response to Arguments***

3. Applicant's arguments filed June 9, 2006 have been fully considered but they are not persuasive.

4. Applicant argues that neither Gröger or Kato teach or suggest a distance between nearest edges of bearing pins equal to or less than a distance between nearest edges of their respective slots such that the pins contact the nearest edges of the bolt slots.

In response, although Gröger's figures do not explicitly disclose the distances being equal to or less than one another Gröger does suggest that the pins are capable of coming in contact with the edge of the slot which would make the two distances equal. Gröger discloses in C3/L17-20 that the slotted bore is provided to compensate for thermal expansion of the guide rail. Upon thermal expansion of the guide rail the pin is capable of contacting the nearest edge of the slot and therefore making the two distances equal to each other. Since clms 1 and 7 recites "wherein at an operating temperature" in line 10 and 9, respectfully, and thermal expansion happens at temperatures higher than ambient temperatures (e.g. operating temperature of an engine) Gröger anticipates both of the independent claims in the instant application.

5. Applicant also argues that Kato does not teach a chain guide having slots or a mounting surface for mounting bolts. Examiner agrees however, the reference of Kato is only being used to teach that a bolt can be used in a system as a means of securing two or more parts together.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

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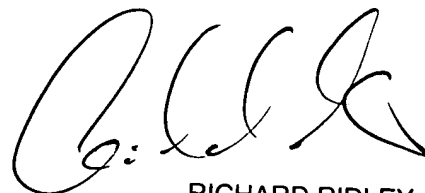
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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6/12/2006

A handwritten signature in black ink, appearing to read 'R. Ridley', is positioned above the printed name and title.

RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER